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**REMARKS****INTRODUCTION**

Claims 1, 2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31 and 33-39 were previously and are currently pending and under consideration.

Claims 1, 2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31 and 33-39 are rejected.

Claims 1, 2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31 and 33-35, and 37-39 are amended herein.

No new matter is being presented, and approval and entry are respectfully requested.

**ENTRY OF AMENDMENT UNDER 37 CFR §1.116**

Applicant requests entry of this Rule 116 Response because:

(a) the amendments were not earlier presented because the Applicant believed in good faith that the cited prior art did not disclose the present invention as previously claimed;

(b) the amendments of the claims should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and

(c) the amendments do not significantly alter the scope of the claims and place the application at least into a better form for purposes of appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

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**REJECTIONS UNDER 35 USC § 103**

In the Office Action, claims 1, 2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31 and 33-39 were rejected under 35 U.S.C. § 103 as being unpatentable over Burge in view of Brush. This rejection is traversed and reconsideration is requested.

The rejection is traversed because the proposed modification of Burge would change the principle of operation of Burge. As stated in MPEP § 2143.01: "THE PROPOSED MODIFICATION CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE[.] If the proposed modification or combination of the prior art would change the principle of operation of the prior art ... being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious ... The court reversed the [obviousness] rejection holding the 'suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.' 270 F.2d at 813, 123 USPQ at 352.)."

The rejection proposes modifying Burge to have virtual three-dimensional worlds with a user-controlled avatar therein, as taught by Brush. However, this modification overlooks the significantly different operational principles of Burge and Brush. Burge is a client-server database system with simple menus and user interfaces with which a user interacts. The navigational input in Burge is nothing more than "user selections" (column 7, lines 26-30). The user input only navigates a top-down hierarchy of shopping information (column 6, lines 38-48; and "Shoppers traverse the electronic shopping service by making selections from displays or screens that present shopping options which may be represented by icons or selectable screen regions as indicated by buttons", column 4, lines 1-17). Burge's system can be implemented with simple text or graphical menu systems (column 2, lines 7-9). In sum, Burge discloses a well-known hierarchical information selection system for shopping that does not relate to virtual reality modeling or simulation.

The rejection proposes modifying Burge with features of a virtual world as disclosed by Brush. However, as confirmed by Burge, virtual reality is a technology that operates significantly differently than conventional menu/selection based systems as taught by Brush. Brush remarks that "[w]hile it was the advent of two dimensional graphically intense web sites that spurred the

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popularity of the Internet, the next level of technology may bring Internets ... to a new level [where] a user interacts with or exists within a site and experiences and perceives a site from within" (column 1, lines 52-61). The entire Background section of Brush emphasizes that the discussed Virtual Reality Modeling Language is significantly new and different from the information navigation systems typified by Burge. Issues such as latency, determining a user's interests or actions based on an avatar, and so on, are not present with Burge. Furthermore, in U.S. Patent 5,884,029 to Brush, the presentation of information must be considered from a perspective completely different than Burge; the perspective of an avatar, which is "an extremely significant step in the development of traversing the world wide web" (Brush, column 2, lines 35-38).

In view of the above, it is respectfully submitted that the proposed modification of Burge is unobvious because it would change its principle of operation. Withdrawal of the rejection is respectfully requested.

The unobviousness of the proposed modification is further apparent in the lack of teachings in the prior art - individually or combined - relating to how control of an avatar in a first virtual scene or world can actually be used to optimize content or positioning of objects representing content in a second virtual scene.

Claim 1, for example, recites "storing ... positions and/or gaze orientation information of said avatar as controlled in said first virtual reality scene by said user", and "weight[ing] or identify[ing] items of content that are of interest to said user according to the stored positions and/or the gaze orientation information of said avatar relative to positions of said predefined virtual objects in said first virtual reality scene". This information is analyzed for providing a second virtual reality scene. The rejection states that Brush does not analyze the action of the avatar relative to virtual objects to derive weighted features of the user. The rejection compares these features to the proximity-triggered selecting of Burge (column 3, line 64, to column 4, line 8). This portion of Burge discusses monitoring movements for passively and automatically selecting and deselecting an object, which is different than using stored positions in relation to an object to weight or identify items of content that are of interest to the user. Passively selecting or deselecting an object by incidental proximity does not indicate that the object is of interest. For example, an object B, between objects A and C, could be passively selected when

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navigating from A to C and yet the user may have no interest in B. However, analyzing historical information such as plural stored positions and/or gaze orientation information relative to objects can indicate a user's interest or content of interest (e.g., number of approaches, time gazing, etc.), which can be used to provide optimal objects positions in a second virtual scene for prominent display.

The other independent claims recite similar features. Withdrawal of the rejection is further respectfully requested.

The rejection is also traversed because a prima facie case of obviousness has not been established; the rejection does not provide a motivation in the prior art for combining Brush and Burge. The rejection's reasoning for the proposed combination is found on page 5, lines 1-10 of the Office Action. First, the rejection states that "[b]ecause Brush [Burge?] already has many different weighted features ... it would have been obvious to ... modify Burge [to] include a three-dimensional shopping virtual world ... to provide the user a more realistic and convenient shopping experience." The first part of the reasoning ("already has") does not show a motive because it is only a statement that Brush can be modified (see MPEP § 2143.01 stating that mere modifiability is an insufficient motive). The second part of the reasoning ("to provide ... a more realistic and convenient shopping experience") is not a motive provided by the prior art; neither reference discusses or suggests the stated benefit. The stated benefit of realism and convenience only results after the references are combined. As stated at the beginning of MPEP § 2143.01, "The prior art must suggest the desirability of the claimed invention [the combination]". However, the suggested benefit is the result of the combination; the combination cannot itself supply the motivation for the combination.

The Examiner is respectfully requested to either indicate where prior art indicates the desirability of combining Brush and Burge, or withdraw the rejection.

Finally, the rejection is traversed because features of the amended claims are not taught by the corresponding cited portions of Burge. The rejection proposes that Burge has plural virtual worlds (two-dimensional) with predefined objects having items of content. In sum, the rejection treats the virtual reality worlds/scenes, objects, etc. of the present claims as equivalent to virtual shops of Burge but without a third graphical dimension (see page 2 of the Office Action quotes claim 1 but omits the recitation of "three-dimensional"). However, a virtual reality scene

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is not analogous to Burge's "database containing information about specific products and services offered by merchants" as cited by the Examiner. As defined in the Microsoft Computing Dictionary (third edition) "virtual reality" is a "simulated 3-D environment that a user can experience and manipulate as if it were physical". The cited portions of Burge have no relation to virtual reality scenes, objects, etc. Withdrawal of the rejection is respectfully requested.

### DEPENDENT CLAIMS

The dependent claims are deemed patentable due at least to their dependence from allowable independent claims. These claims are also patentable due to their recitation of independently distinguishing features. For example, claim 2 recites "definition data of said second virtual reality scene is selected from sets of definition data of said respective virtual reality scenes". This feature is not taught or suggested by the prior art. Withdrawal of the rejection of the dependent claims is respectfully requested.

### CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,  
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